SOURCE CODE ANNOTATION LANGUAGE

ABSTRACT

Techniques and tools for implementing a source code annotation language are described. In one aspect, keywords are added to a function interface to define a contract

5   for the function independent of function call context. In another aspect, annotations are inserted at global variables, formal parameters, return values, or user-defined types. The annotations include, for example, properties and qualifiers. A property can indicate, for example, a characteristic of a buffer. In another aspect, an annotation indicates that a value has usability properties sufficient to allow a function to rely on the

10   value, where the usability properties depend on value type.